

Abstract of the e Disclosure

In the cleaning using the self-propelled cleaning device, firstly the
cleaning device moves alongside the wall surface and then a reference
5 direction is set. Next, the cleaning device advances alongside the wall
surface by a prescribed distance, makes a right-angle turn, and travels in
the reference direction. When the cleaning device reaches the surface
of the opposing wall, it moves in a spiraling manner. At that time, the
orientation angle of the cleaning device estimated using a gyro sensor is
10 checked and corrected. If an obstacle is encountered while traveling, the
cleaning device travels on a path that avoids the obstacle or travels in a
spiral manner in a region in front of the obstacle.